

Title (en)
AZEOTROPE-LIKE COMPOSITIONS OF TETRAFLUOROPROPENE AND TRIFLUOROIODOMETHANE

Title (de)
AZEOTROPARTIGE ZUSAMMENSETZUNGEN AUS TETRAFLUORPROPEN UND TRIFLUORIODMETHAN

Title (fr)
COMPOSITIONS DE TYPE AZEOTROPE DE TETRAFLUOROPROPENE ET DE TRIFLUOROIODOMETHANE

Publication
EP 1735398 B2 20160817 (EN)

Application
EP 05736885 A 20050418

Priority

- US 2005013199 W 20050418
- US 82607204 A 20040416
- US 82681104 A 20040416
- US 82659204 A 20040416
- US 82672704 A 20040416
- US 82659704 A 20040416

Abstract (en)
[origin: WO2005103188A1] Provided are azeotrope-like compositions comprising tetrafluoropropene and pentafluoropropene and uses thereof, including use in refrigerant compositions, blowing agent compositions, foamable compositions, foams, sterilant compositions, sprayable compositions, and systems and methods using same.

IPC 8 full level
C09K 5/04 (2006.01); **C08J 9/00** (2006.01); **C08J 9/14** (2006.01); **C09K 3/30** (2006.01); **C11D 7/50** (2006.01); **C11D 17/00** (2006.01); **F25D 1/00** (2006.01)

CPC (source: EP KR US)
C08J 9/146 (2013.01 - EP US); **C09K 3/30** (2013.01 - EP US); **C09K 5/02** (2013.01 - KR); **C09K 5/04** (2013.01 - KR); **C09K 5/045** (2013.01 - EP US); **C11D 7/5063** (2013.01 - EP US); **C08J 2205/052** (2013.01 - EP US); **C08J 2207/04** (2013.01 - EP US); **C09K 2205/122** (2013.01 - EP US); **C09K 2205/126** (2013.01 - EP US)

Citation (opposition)
Opponent :

- WO 9948993 A1 19990930 - IKON CORP [US]
- JP H0959612 A 19970304 - MATSUSHITA ELECTRIC IND CO LTD
- WO 9420588 A1 19940915 - NIMITZ JONATHAN S [US], et al
- JP H04110388 A 19920410 - DAIKIN IND LTD
- WO 2004037752 A2 20040506 - HONEYWELL INT INC [US], et al
- US 2004256594 A1 20041223 - SINGH RAJIV R [US], et al
- WO 2004037913 A2 20040506 - HONEYWELL INT INC [US], et al
- US 5001287 A 19910319 - FERNANDEZ RICHARD E [US], et al
- Priority document US 10/826072 filed on 16.04.2004
- National Aeronautics and Space Administration Contract No. NAS-7-918, Technical Support Package on Nearly Azeotropic Mixtures to Replace Refrigerant 12
- KOPKO W.L.: "Beyond CFCs: Extending the Search for New Refrigerants", pages: 39 - 46
- ARI Standard 700, Specifications for Fluorocarbon Refrigerants

Designated contracting state (EPC)
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DOCDB simple family (publication)
WO 2005103188 A1 20051103; AT E417085 T1 20081215; AU 2005236038 A1 20051103; AU 2005236038 B2 20081002; AU 2005236039 A1 20051103; AU 2005236039 B2 20080821; DE 602005011594 D1 20090122; EP 1735397 A1 20061227; EP 1735397 B1 20210217; EP 1735398 A1 20061227; EP 1735398 B1 20120627; EP 1735398 B2 20160817; EP 1735400 A1 20061227; EP 1735400 B1 20180124; EP 1735401 A1 20061227; EP 2017320 A1 20090121; EP 2272936 A1 20110112; EP 2272936 B1 20181031; EP 2292715 A1 20110309; EP 2292715 B1 20120822; EP 2336266 A1 20110622; EP 2336266 B1 20120822; EP 3275963 A1 20180131; ES 2389260 T3 20121024; ES 2389260 T5 20170216; ES 2392327 T3 20121207; ES 2392333 T3 20121207; ES 2666162 T3 20180503; ES 2860760 T3 20211005; JP 2007532767 A 20071115; JP 2012067308 A 20120405; JP 2012067309 A 20120405; JP 2012067310 A 20120405; JP 5122944 B2 20130116; JP 5662294 B2 20150128; KR 101222878 B1 20130117; KR 101265537 B1 20130521; KR 101331778 B1 20131121; KR 20070002093 A 20070104; KR 20070007366 A 20070115; KR 20070007935 A 20070116; KR 20130018376 A 20130220; LT 1735400 T 20180425; US 2009092556 A1 20090409; US 2012204594 A1 20120816; US 8163689 B2 20120424; US 8492327 B2 20130723; WO 2005103189 A1 20051103; WO 2005103190 A1 20051103; WO 2005103191 A2 20051103; WO 2005103191 A3 20070222; WO 2005103192 A1 20051103

DOCDB simple family (application)
US 2005013183 W 20050418; AT 05736618 T 20050418; AU 2005236038 A 20050418; AU 2005236039 A 20050418; DE 602005011594 T 20050418; EP 05736672 A 20050418; EP 05736885 A 20050418; EP 05738906 A 20050418; EP 05738984 A 20050418; EP 08012662 A 20050418; EP 10010492 A 20050418; EP 10175327 A 20050418; EP 10179505 A 20050418; EP 17177590 A 20050418; ES 05736672 T 20050418; ES 05736885 T 20050418; ES 05738906 T 20050418; ES 10010492 T 20050418; ES 10179505 T 20050418; JP 2007508632 A 20050418; JP 2011229788 A 20111019; JP 2011229808 A 20111019; JP 2011230957 A 20111020; KR 20067024062 A 20050418; KR 20067024064 A 20050418; KR 20067024065 A 20061116; KR 20137001484 A 20050418; LT 05738906 T 20050418; US 2005013184 W 20050418; US 2005013185 W 20050418; US 2005013198 W 20050418; US 2005013199 W 20050418; US 201213453560 A 20120423; US 33533508 A 20081215